

# EXECUTIVE SUMMARY

## INTRODUCTION

### Intended Use of the EIR/EIS

The San Dieguito River Valley Regional Open Space Park Joint Powers Authority (JPA) and the U.S. Department of the Interior, Fish and Wildlife Service (USFWS) have determined that the San Dieguito Wetland Restoration Project is subject to both the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), and the adopted local CEQA guidelines for the JPA, the City of Del Mar, and the City of San Diego. The need for numerous state and local permits makes the project subject to CEQA, while compliance with NEPA is required where there is federal involvement in a project. In this case, NEPA would apply to the future issuance of a 404 Permit from the U.S. Army Corps of Engineers, as well as to the future granting of federal funds for various aspects of project implementation. To address the requirements of both CEQA and NEPA, the JPA and USFWS have prepared this joint Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the San Dieguito Wetland Restoration Project. Because NEPA and CEQA are somewhat different with regard to procedural and content requirements, the document has been prepared to comply with whichever requirements are more stringent. The JPA is the lead agency for compliance with CEQA, while USFWS is the lead federal agency for compliance with NEPA. In accordance with both CEQA and NEPA, the lead agencies have the responsibility for the scope, content, and legal adequacy of the document. Therefore, all aspects of the EIR/EIS scope and process are being coordinated between the two agencies.

This joint EIR/EIS is an informational document intended to inform both the decision makers and the public of the potentially significant environmental effects associated with the design, construction, and long-term maintenance of a coastal wetland restoration project at the San Dieguito Lagoon. The EIR/EIS also addresses potential impacts associated with the implementation of a park master plan for the lagoon area that is proposed by the JPA. Approval of this park master plan will establish the planning framework for the overall restoration and interpretation of the westernmost portion of the San Dieguito River Valley. In addition to tidal wetland restoration, the plan addresses upland and non-tidal wetland restoration, public access and trails, interpretation features including a visitor center, and the potential future uses of designated disposal sites intended to receive excavated/dredged materials generated from proposed tidal restoration activities.

The proposal to restore the coastal wetlands and upland areas surrounding the San Dieguito Lagoon, as well as the public access and interpretation components of the project, are part of the vision for the larger San Dieguito River Valley Regional Open Space Park. This open space park planning effort extends from Volcan Mountain near Julian westward along the San Dieguito River drainage to the ocean at Del Mar. The proposals for coastal wetland and upland restoration near the lagoon, the Coast to Crest Trail, and other trail and interpretive concepts were adopted as part of the San Dieguito River Park Concept Plan (San Dieguito River Park JPA 1994a), by the JPA in 1994. In association with the processing of the Park Concept Plan, the JPA also prepared and certified the San Dieguito River Park Concept Plan Program EIR (San Dieguito River Park JPA 1994b). This Program EIR is incorporated by reference into the current EIR/EIS.

**1 Project Location**

2 The San Dieguito Wetlands Restoration planning area encompasses approximately 440 acres at the  
3 western end of the San Dieguito River Valley and generally includes the public lands located  
4 between El Camino Real on the east, the Pacific Ocean on the west, Via de la Valle on the north,  
5 and the northern edge of the Carmel Valley planning area on the south. The project site, which is  
6 situated entirely within the coastal zone, is located within incorporated boundaries of the cities of  
7 Del Mar and San Diego in San Diego County, California.

**8 Project Background**

9 The San Dieguito Lagoon was once the largest of the six San Diego coastal lagoons. Restoration of  
10 the San Dieguito coastal wetlands has been a stated goal of the Cities of Del Mar and San Diego,  
11 local citizens, and the organizers of the San Dieguito River Park JPA for over two decades. In the  
12 late 1970s, the City of Del Mar and the State Coastal Conservancy prepared a plan for revitalizing  
13 and managing what remained of the lagoon and surrounding areas west of Interstate 5 (I-5) near  
14 the mouth of the river. As a result of that effort the City of Del Mar adopted the San Dieguito  
15 Lagoon Resource Enhancement Program in 1979 as part of its General Plan. In 1983, a portion of  
16 the enhancement program was implemented using a grant from the Coastal Conservancy. This  
17 restoration program involved dredging a new tidal basin on 70 acres of land acquired by the  
18 California Department of Fish and Game as an Ecological Reserve and located in the southern  
19 corner of the historic wetlands just west of I-5. The river mouth was also opened, thus restoring  
20 tidal influence, at least temporarily, to the entire coastal wetland.

21 Since this initial restoration effort was completed, the restoration goal has been expanded to  
22 address both the west and east sides of I-5, with the stated goal of restoring what remains of the  
23 historically significant San Dieguito Lagoon system. In the early 1990s, efforts began to direct  
24 coastal wetland mitigation proposals to San Dieguito. One possible mitigation project was  
25 identified when the California Coastal Commission (CCC) in July 1991 adopted new permit  
26 conditions for the San Onofre Nuclear Generating Station (SONGS) Units 2 and 3. These  
27 conditions required Southern California Edison (SCE) to create or substantially restore 150 acres of  
28 tidal wetland as mitigation for impacts to the marine environment caused by the construction and  
29 operation of SONGS Units 2 and 3. The CCC identified eight wetlands, including San Dieguito, in  
30 Southern California that could be evaluated for suitability as the required mitigation site. By June  
31 1992, the CCC had approved San Dieguito as the site for the required mitigation.

32 The San Dieguito Wetland Restoration Project addressed by this EIR/EIS includes the proposal to  
33 restore wetlands as mitigation for impacts caused by SONGS Units 2 and 3. This aspect of the  
34 restoration project would be implemented by SCE, as the managing owner of SONGS. SCE has  
35 identified a preferred alternative, the Mixed Habitat Alternative, for implementing the  
36 requirements of the CCC. This alternative is one of six (including the No Action Alternative) that  
37 is analyzed in this EIR/EIS. The proposed tidal wetland restoration component of this project, in  
38 addition to addressing CCC permit conditions, also includes tidal wetland restoration acreage to  
39 fulfill the conditions of a compromised settlement between SCE and Earth Island Institute, Inc.  
40 The restoration plan recommended for approval and/or permitting by the lead agencies will be  
41 analyzed by the CCC to determine the amount of wetland credits being provided to address the  
42 CCC permit conditions. To make this determination, the CCC will consider the standards and  
43 criteria set forth by the CCC staff for defining “created or substantially restored” tidally influenced

1 salt marsh. As stated previously, the permit conditions require SCE to submit a plan that includes  
2 a total of 150 acres of credit, including the creation and/or substantial restoration of 115 acres of  
3 tidal wetland. The SONGS permit states that up to 35 acres of enhancement credit will be given for  
4 permanent, continuous tidal maintenance if the final restoration plan provides for enhancement of  
5 at least 126 acres through tidal maintenance. The 35 acres of enhancement credit is based upon the  
6 determination that 126 acres of existing wetlands at San Dieguito will be enhanced by 28 percent if  
7 the tidal flows are maintained continuously. If less than 126 acres are enhanced, then the amount  
8 of enhancement credit awarded will be equal to 28 percent of the total number of existing tidal  
9 wetland acres that are enhanced by tidal maintenance. In order to calculate acreage credits  
10 pursuant to the SONGS coastal development permit, the CCC staff provisionally has defined the  
11 upper boundary for created or restored high tidal salt marsh as +4.5 feet National Geodetic  
12 Vertical Datum of 1929 (NGVD). This elevation was determined by CCC scientific staff based on  
13 data collected at several existing wetland sites.

14 The tidal hydraulics of the restored system under alternative restoration designs have been  
15 modeled in a series of studies by Jenkins and Wasyl (1998, 1999a-d). The resulting “hydroperiod  
16 functions” that relate tidal inundation/exposure frequencies to elevations on the shore lead to a  
17 predicted upper boundary of high salt marsh that is in the range of +4.7 feet to +4.9 feet NGVD,  
18 but differs slightly between alternatives. This EIR/EIS recognizes that in nature there is not  
19 generally a sharp demarcation between tidally influenced wetlands and adjacent non-tidal  
20 wetlands or uplands, but rather a transition zone of diminishing tidal influence with increasing  
21 elevation. In addition, there is not necessarily universal agreement among specialists concerning  
22 the upper boundary of salt marsh that is substantially free of upland species. Accordingly, in  
23 evaluating the creation of wetlands by the different restoration alternatives, the EIR/EIS treats +4.5  
24 feet NGVD as the upper limit of high tidal salt marsh, but recognizes as transitional wetland  
25 habitat the area between +4.5 feet NGVD and the upper limit predicted by the hydroperiod  
26 function. This approach provides the information needed by the public, the agencies, and the  
27 decision makers, including the CCC, to make informed decisions about the project.

28 It is not the purpose or intent of this EIR/EIS to evaluate either the adequacy of the CCC permit  
29 conditions as mitigation for impacts from SONGS Units 2 and 3, or the effectiveness of the  
30 proposed mitigation plan in meeting the minimum standards and objectives set forth for wetland  
31 mitigation in the CCC Permit for SONGS Units 2 and 3. The determination as to whether or not  
32 the SCE restoration plan meets the approved permit condition is the sole responsibility of the CCC.

33 The proposal to restore coastal wetlands is one element, albeit the predominant element, of a larger  
34 restoration and public access plan for all of the public open space lands within the San Dieguito  
35 River Valley that lie between El Camino Real on the east and the Pacific Ocean on the west.  
36 Various adopted planning documents, including the San Dieguito River Park Concept Plan and the  
37 City of Del Mar San Dieguito Lagoon Enhancement Program, include goals for restoring both  
38 coastal wetlands and adjoining upland and freshwater wetland habitats and providing for  
39 compatible public access and resource interpretation. All of these components have been  
40 incorporated into the various wetland restoration alternatives, as well as the accompanying draft  
41 park master plan for this area.

1 **Purpose of and Need for the Project**

2 Historically, the San Dieguito Lagoon and its adjoining coastal wetlands occupied much of the  
3 western San Dieguito River Valley and included a mosaic of vegetated salt and brackish marsh,  
4 with associated tidal embayments, sloughs, and mudflats. The San Dieguito wetlands have  
5 experienced extensive filling and alteration, beginning as early as the late 1800s. Today, less than  
6 half of the historic wetlands remain intact. During the same period that the lagoon and marshland  
7 were being filled, the surrounding area was also being developed for a variety of commercial and  
8 residential uses. Consequently, the historical context of the tidal marsh ecosystem components  
9 and the regular influence of the ocean tidal waters have been seriously diminished. The portion of  
10 the historical marsh system that still exists at the San Dieguito Lagoon continues to be viewed as  
11 significant, despite the degradation that has occurred over the years to its wetland and aquatic  
12 functions.

13 The primary purpose of the proposed project is to restore the habitats that historically occurred  
14 within this coastal area, taking into consideration the constraints now imposed by existing adjacent  
15 land uses. In light of permanent losses of adjacent wetlands and aquatic areas in addition to  
16 permanent hydrologic modifications, and urbanization surrounding San Dieguito over the last  
17 century, complete restoration of wetland and aquatic functions to historical levels is probably not  
18 possible. However, there is opportunity for the creation and/or substantial restoration of large  
19 portions of the area that historically supported coastal wetlands. In addition, recent public  
20 acquisitions of the western river valley's floodplain areas and surrounding uplands provides many  
21 opportunities for restoration of native grasslands, coastal sage scrub, and other upland habitats, as  
22 well as freshwater habitats including freshwater marsh and southern willow scrub. Finally, the  
23 project offers opportunities for public access and interpretation/education.

24 **Scope of the EIR/EIS**

25 This EIR/EIS contains the full range of topics required under both CEQA and NEPA, including a  
26 table of contents, summary, purpose and need for the proposed action, description of alternatives,  
27 environmental setting, environmental impact analysis for short- and long-term, direct and indirect  
28 impacts, as well as cumulative impacts, mitigation measures and monitoring, growth inducing  
29 impacts, and significant irreversible changes associated with the project. The document presents a  
30 range of alternatives, which are all evaluated at the same level of detail in the environmental  
31 consequences section, as required under NEPA. A number of technical studies were conducted in  
32 association with the development of project alternatives and the preparation of this document.  
33 These studies are summarized in the body of the EIR/EIS and are provided as appendices, as  
34 deemed appropriate.

35 **Required Permits and Approvals (Federal, State, and Local)**

36 The following actions and approvals are anticipated to be required:

- 37 • **San Dieguito River Park JPA** — Approval by the JPA Board of Directors of a final  
38 restoration plan and associated Park Master Plan and certification of the Final EIR/EIS.
- 39 • **City of Del Mar** — Permit for grading and possible Amendment to the City of Del Mar's  
40 General Plan and LCP and Coastal Development Permit.

- 1 • **City of San Diego** — Land Development and Sensitive Lands Permit, possible Coastal  
2 Development Permit, Conditional Use Permit for the nature center, right-of-entry and  
3 possible encroachment permit for various trail segments.
- 4 • **U.S. Army Corps of Engineers** — Individual 404 and Section 10 Permits.
- 5 • **U.S. Fish and Wildlife Service** — Section 7 Consultation.
- 6 • **California Department of Fish and Game** — Streambed Alteration Agreement and  
7 possible Encroachment Permit.
- 8 • **Caltrans, District 11** — Encroachment Permit.
- 9 • **North County Transit District** — Possible Encroachment Permit.
- 10 • **Regional Water Quality Control Board** — 401 Certification and/or Discharge Permit.
- 11 • **San Diego County Air Pollution Control District** — Permit to Operate for Dredge.
- 12 • **22nd District Agricultural Association** — Approval to utilize portions of the District  
13 property for the project.
- 14 • **California State Lands Commission** — Possible Lease of State Lands.
- 15 • **California Coastal Commission** — Approval of the Final Restoration Plan and Coastal  
16 Development Permit(s).
- 17 • **California Public Utilities Commission** — Approval of the relocation of San Diego Gas &  
18 Electric Company's 69 kV electric transmission line Circuit TL 667 and 12 kV distribution  
19 underbuilds.

## 20 **Project Description**

21 The San Dieguito Wetland Restoration Project includes restoration and enhancement of tidal  
22 wetlands, the development of native upland habitat on the public properties surrounding the  
23 proposed wetlands, and the enhancement and expansion of several freshwater and seasonal  
24 coastal wetland areas. Another important element of the project is the implementation of a public  
25 access and interpretive plan for the project area that includes proposals for a regional trail, nature  
26 trails, a nature/interpretive center, trail staging areas, and an interpretive program. In accordance  
27 with the adopted San Dieguito River Park Concept Plan, a Park Master Plan for this portion of the  
28 San Dieguito River Valley has also been drafted to address all of these project components.

29 A major component of this planning effort is a tidal restoration proposal to (1) restore the aquatic  
30 functions of the lagoon through permanent inlet maintenance and expansion of the lagoon's tidal  
31 prism, and (2) create subtidal and intertidal habitats on both the east and west sides of I-5. Tidal  
32 restoration would involve modifications to the existing drainage pattern, excavation of the tidal  
33 inlet to promote continual tidal exchange, excavation/dredging of sediments on up to 247 acres to  
34 create/restore coastal wetlands, construction of three berms (two for the Reduced Berm  
35 Alternative) along the river to maintain existing flood flows and direct sediment transport to the

1 ocean, and identification of appropriate disposal sites for excavated/dredge material generated  
2 from the project. Five nesting sites, which would provide 13.7 acres of flat nesting area for the  
3 California least tern, western snowy plover, and other shorebirds, are also proposed in the  
4 restoration plan.

5 The draft EIR/EIS analyzes six project alternatives including the Mixed Habitat, Maximum Tidal  
6 Basin, Maximum Intertidal, Hybrid, Reduced Berm, and No Action alternatives. All but the  
7 Reduced Berm and No Action alternatives have the same restoration footprint. Each of five action  
8 alternatives proposes a different mix of tidally-influenced habitat types and require a different  
9 grading plan, with those alternatives that would create larger areas of subtidal and low salt marsh  
10 requiring more excavation than those alternatives that would create intertidal mudflats and high  
11 marsh. Excavation generated from these alternatives would range from 1.2 million to 3 million  
12 cubic yards.

### 13 **PROJECT IMPACTS**

14 The significant environmental impacts of the five project alternatives (with the exception of the No  
15 Action Alternative) are summarized in tables ES-2 through ES-5 by resource, along with proposed  
16 mitigation measures and level of significance after mitigation. Potentially significant  
17 environmental impacts have been identified in the areas of land use, landform alteration/visual  
18 quality, hydrology/water quality, traffic circulation, noise, air quality, geology and soils, public  
19 utilities, biological resources, public health and safety, and natural resources. The project includes  
20 measures to mitigate some potential impacts, while other mitigation will be made conditions of  
21 subsequent permits. Cumulative impacts are not addressed in these tables but are described in  
22 Chapter 6 of this EIR/EIS.

23 The project has beneficial impacts, as well, including:

- 24 • Helping to restore aquatic functions by opening the tidal channel and maintaining tidal  
25 exchange between the ocean and lagoon/wetlands, thereby improving water quality and  
26 health of wetland habitat.
- 27 • Restoring habitat and improving existing habitat values, thereby benefiting threatened and  
28 endangered species (least tern, snowy plover, and Belding's savannah sparrow).
- 29 • Increasing acreage of all tidal habitats with beneficial impacts on associated species.
- 30 • Improving functions and values of existing tidal habitats with beneficial impacts on  
31 associated species.
- 32 • Enhancing functions and values of seasonal wetlands with beneficial impacts on associated  
33 species.
- 34 • Restoring native uplands with beneficial impacts on associated species.
- 35 • Enhancing fresh and brackish water marsh, riparian woodland and scrub habitats.

- 1 • Creation of nest sites would benefit least tern and snowy plover and other waterbirds that  
2 may use these sites and would contribute to the restoration of ecosystem functions and  
3 values.
- 4 • Preserving the site in open space and restoring a number of filled and otherwise degraded  
5 areas with native vegetation, thereby improving the overall aesthetic qualities of the site.
- 6 • Providing additional recreational opportunities in areas currently closed to public use  
7 through the design and implementation of a regional trail, nature trails, a  
8 nature/interpretive center, trail staging areas, and an interpretive program.

## 9 **RECOMMENDATIONS**

10 In accordance with Section 15126.6(e)(2) of the CEQA Guidelines, the lead agencies have reviewed  
11 the alternatives presented in this document in order to determine the environmentally superior  
12 alternative. In making this selection, the agencies are required to consider the short- and long-term  
13 environmental impacts and benefits of each alternative. The very nature of the proposal, the  
14 restoration of native wetland and upland habitats, makes this a difficult task. As developed, each  
15 of the restoration alternatives would provide important but somewhat different benefits to the  
16 environment. Therefore, for the purpose of selecting the environmentally superior alternative, the  
17 lead agencies did not attempt to rank these benefits; rather, all of the restoration alternatives were  
18 viewed as having similar environmental benefits. The alternatives were then ranked in terms of  
19 their overall impacts on the environment. Based on this analysis, the Maximum Intertidal  
20 Alternative is considered the environmentally superior alternative. Implementation of this  
21 alternative would require the least amount of excavation of the four major restoration alternatives  
22 (Mixed Habitat, Maximum Tidal Basin, Maximum Intertidal, and Hybrid). Reduced grading  
23 would result in reduced impacts to air quality, traffic, landform, water quality, and noise. The  
24 Reduced Berm Alternative would require significantly less initial grading. However, this  
25 alternative was not selected as the environmentally superior alternative because of its greater long-  
26 term environmental impacts. These impacts result from the need for more frequent maintenance  
27 at the river mouth and in the river channel due to the reduced tidal prism provided by this  
28 alternative. Such increases in maintenance would result in greater disruption at the river mouth  
29 and on the beach over the life of the project, resulting in more frequent short-term impacts to  
30 recreation, visual quality, and noise.

31 Neither CEQA nor NEPA require that the environmentally superior alternative be the same as the  
32 “agency preferred” alternative, therefore, it should not be automatically assumed that the  
33 environmentally superior alternative will also be considered the agencies’ preferred alternative. In  
34 fact, the lead agencies have not yet selected their preferred alternative. This will be done after  
35 taking into consideration the public comments received for the draft EIR/EIS. The Final EIR/EIS,  
36 which will be made available for public review in accordance with NEPA, will identify the lead  
37 agencies’ preferred alternative.

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Land Use	Use of SA3 and the access road leading to this construction staging area could be incompatible with residences along Racetrack View Drive.	<p>Hours of operation at SA3 shall be limited to 7 A.M. to 7 P.M. and nighttime lighting shall be shielded and limited to that needed for security <u>and nighttime maintenance, should this activity be permitted by the appropriate land use authorities.</u> The construction contractor shall be responsible for implementing this mitigation, with oversight by SCE or JPA.</p> <p>Use of the proposed new haul road for construction access to SA3 shall be limited to mobilization, demobilization, and occasional truck traffic for equipment maintenance and exchange and hours of operation limited to 7 A.M. to 7 P.M. Use of the haul road for daily access by construction workers going to and from the work site shall be prevented. The construction contractor shall be responsible for implementing this mitigation, with oversight by SCE or JPA.</p>	Less than significant
	Excavation/construction west of I-5, inlet dredging, and maintenance dredging would produce temporary noise and night lighting impacts on residential areas along Sandy Lane. Additionally, periodic disruption of beach use would occur during maintenance dredging.	A public outreach/public comment program shall be developed by the applicant and approved by the appropriate affected agencies (City of Del Mar, City of San Diego, CCC, JPA).	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Land Use	Crossing the river mouth on foot would become relatively more difficult most of the time and prevented at some periods, particularly during high tides.	<u>Prior to the approval of discretionary permits required for the project from the City of Del Mar, the applicant shall prepare, to the satisfaction of the City of Del Mar, a design for a pedestrian access way along the south side of the inlet channel that would accommodate access to Camino Del Mar. In addition, the applicant shall also agree to fund and construct said pathway prior to opening the inlet channel. If based on additional design work, the City of Del Mar determines that the pathway is in fact technically infeasible, an alternative access way to Camino Del Mar shall be considered.</u>	<u>Less than significant if technically feasible to construct the pathway in a timely manner.</u>
	If either DS37 or DS38 were used as disposal sites during peak times, such as the fair or racing season, disposal activities could conflict with activities at these sites.	Disposal sites D37 and D38 shall not be used during peak times such as the Del Mar fair or racing season.	Less than significant
	The Coast to Crest Trail could conflict with use of the 22 <sup>nd</sup> District Agricultural Association's seasonal parking lot and Surf and Turf golf driving range.	A 5- to 6-foot-high fence with 1-inch or smaller mesh shall be provided between the driving range and the trail.  A lodgepole or post and cable fence shall be provided between the trail and the District's parking areas.  The final trail design and alignment shall be coordinated with the District in order to minimize potential conflicts.	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Land Use	The preferred alignment for the Coast to Crest Trail east of the Via de la Valle property is to travel along the north side of the San Dieguito River near the southern end of the Horsepark property. This alignment could result in potentially significant land use conflicts between the existing equestrian operation and public trail uses.	Prior to construction of the Coast to Crest Trail, the JPA shall coordinate the trail alignment with the District to ensure that use conflicts have been minimized. Measures such as the installation of fences, gates, and possibly vegetative screening shall be considered and District staff shall be consulted to determine the best alignment for the trail through the Horsepark facility.	Less than significant
	Land use compatibility impacts to residential areas located to the north of the site across Via de la Valle could occur if public address systems are used and/or if night lighting is visible.	Implement mitigation measures described for noise and visual resources below.	Less than significant
	Use of a tram on the proposed trail system during the Del Mar fair could cause conflicts with bicyclists, hikers, equestrians, and other users. The tram could cause safety impacts, as well as a diminishment of the overall recreational experience.	No feasible mitigation measures have been identified.	Significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Hydrology/ Water Quality	<p>Construction could result in:</p> <ul style="list-style-type: none"> <li>▪ Spills or leaks of oils or fluids onto ground and into aquifer or wetlands;</li> <li>▪ Potential for increased channel and river bottom scour;</li> <li>• Short-term impacts to water quality (e.g., increased turbidity) during dredging, berm and nesting site construction, and upland disposal.</li> </ul>	<p>The contractor shall attend a pre-construction meeting to review all required environmental mitigation measures prior to the commencement of any construction activity.</p> <p>Prior to the utilization of any construction staging areas, temporary berms/<u>cofferdams</u> shall be constructed around the staging areas to prevent the transport of spilled materials into adjacent waterways.</p> <p>The contractor shall take all appropriate precautions to avoid spillage or leakage of hazardous materials, such as petroleum products, all fueling and maintenance of construction vehicles shall occur either off-site or be limited to the designated staging areas. The contractor shall be responsible for removing and properly disposing of any hazardous materials that are brought onto the construction site as a result of construction activity and/or removing and properly disposing of any soils that become contaminated during the construction process through spillage or leakage. All such contaminated areas shall be cleaned up prior to preparing the construction site and temporary construction staging areas for revegetation. The contractor shall prepare, submit to the JPA and any other designated agencies for review and approval, and follow the recommendations of a spill prevention and contingency plan.</p>	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Hydrology/ Water Quality		<p>The contractor shall construct additional temporary berms around fuel storage areas <u>that shall be maintained for the full time during which construction is occurring and construction equipment is present on the site</u>, and all fuel storage areas shall be confined to designated construction staging areas.</p> <p>The contractor shall construct berms or erect silt curtains around areas being excavated/graded to reduce soil losses to waterways.</p> <p>The contractor shall control fugitive dust emissions through watering or other accepted standard methods of control.</p> <p>Water quality monitoring shall be implemented for the following:</p> <ul style="list-style-type: none"> <li>• Monitor the dewatering effluent to demonstrate that the effluent quality has achieved the appropriate receiving water criteria. Construction may be halted if effluent levels are not within established criteria.</li> <li>• Conduct water quality monitoring during dredging/construction activities; if monitoring results indicate excessive impacts (e.g., depressed dissolved oxygen concentrations), modifications to construction or sediment disposal methods to lessen the magnitude of the impacts shall be developed and implemented in consultation with the appropriate permitting agencies. All designated fill slopes shall be hydroseeded and landscaped within 30 days of completion of grading activities.</li> </ul> <p>Incorporate various engineered erosion control measures into the project design.</p>	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Hydrology/ Water Quality		Temporary sedimentation and desilting basins, to be located between graded areas and adjoining wetlands shall be constructed and maintained <u>until the potential for erosion of graded areas has been minimized through the successful establishment of erosion control landscaping.</u>	Less than significant
	Public use of the proposed trails may result in greater amounts of trash, debris, and wastes from domestic animals (e.g., horses). Runoff containing these materials could adversely impact surface water quality.	Expand the JPA's current trail maintenance program to cover the trails located within the current project area. This maintenance program shall include the requirement to perform regular trail maintenance, including manure and trash removal from and around the trail. Trail tread maintenance intended to avoid erosion problems on natural soil surfaced trails shall occur on as-needed basis. The maintenance program shall include a monitoring component that will determine when and how often trail cleanup should occur. This could result in more frequent maintenance, but under no circumstances shall trail cleanup occur less than once ever two weeks. If seasonal tram use is permitted on the Coast to Crest, then trail cleanup should occur daily during the period in which trams are using the trail.	Less than significant
	The use of area U18 for multiple uses, including equestrian uses and seasonal parking, could result in greater amounts of trash, debris, and wastes from domestic animals (e.g., horses) than under existing conditions. Runoff containing these materials could adversely impact surface water quality.	Implement a routine maintenance program for the area that would include regular trash and debris cleanup, routine removal of manure from the site, protection of slope vegetation to ensure adequate erosion control on adjoining slopes, routine dust control, and proper drainage of the site that is directed away from the adjoining wetlands.	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Geology/ Soils	Grading of construction staging areas, access areas, disposal sites, and public access areas could result in erosion and associated short-term water quality impacts. Erosion of graded slopes at disposal sites could result in potential long-term water quality impacts.	Implement standard short-term erosion control features during grading and construction of permanent erosion control features on slopes of disposal sites.	Less than significant
	Seismically induced ground shaking could result in liquefaction, differential settlement, and lateral spreading, including potential slope failure of berms, nesting sites, freeway embankments, and disposal sites.	Site-specific geotechnical investigations shall be completed in areas proposed to receive fills, including berm areas, nesting sites, public access areas, and disposal sites.	Less than significant
	Overexcavation of area W1 could result in potential slope instability of the adjacent freeway embankment.	A geotechnical investigation shall be completed to determine appropriate slope stability measures.	Less than significant
	Post-construction shrinkage of soil could result in differential settlement and distress of structure foundations.	Dewatering of soils shall be completed prior to sediment placement to allow pre-construction shrinkage of soils.	Less than significant
	Natural corrosivity of on-site soils could result in corrosion of future ferrous metal structures.	Heavy-gauge, corrosion protected, steel drainage pipes/culverts or plastic pipe shall be utilized in the berms.	Less than significant
Biological Resources	Precise elevation controls are necessary to ensure that habitats are graded to design specifications and provide the intended functions and values.	Survey benchmarks shall be established prior to construction and surveyed during construction to ensure that elevations are achieved within a tolerance of +/- 0.25 ft.	Less than significant
	If least terns, snowy plovers, or other water birds were to nest on NS15 in the future, use of the access road and staging area SA3 could affect their reproductive success and risk injury to the birds.	All construction activities within 100 feet (or as otherwise determined by the USFWS) of any California least tern or western snowy plover breeding habitat shall not resume or begin until a qualified, USFWS approved biologist determines that breeding is not taking place.	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Biological Resources		If California least terns or western snowy plovers are breeding, all construction activities within <u>100</u> feet (or as otherwise determined by the USFWS) of the active breeding sites shall be postponed until breeding activities have finished (approximately September 15 or as otherwise determined by surveys and the USFWS).	
	Potential impacts of staging areas and haul routes include the removal of existing vegetation, disruption of wildlife use — including possible nesting on NS15 — alteration of soil and drainage characteristics, and construction-related spills. Although the project commits to restoration of these areas, plans to accomplish this are only generally developed. Final details should be addressed during permitting for the project. Impacts are considered potentially significant but mitigable by confining ground disturbance, parking, and maintenance/ refueling activities to areas that are of lowest value to wildlife and can most easily be restored following construction, and by avoiding the use of areas where sensitive bird species are nesting.	Proposed construction staging areas and haul routes shall be located within the footprint of marsh restoration and the overlap of existing wetlands minimized wherever possible. To achieve this, the following modifications to proposed staging areas and haul routes shall be incorporated into the final grading plans: <ul style="list-style-type: none"> <li>• The haul route that passes east-west under I-5 shall be located as far to the south as possible to avoid the population of Coulter's goldfields on the west side of the bridge and the existing tidal channel east of the bridge. The haul route and water control structure on the southwest side of I-5 shall be placed in ruderal habitat on the berm west of the bridge.</li> </ul>	Less than significant
	The water control structure for haul route to DS38 would temporarily disrupt tidal flows and constrict the area of passage for aquatic organisms. Frequent use of the structure by trucks hauling sediment to DS38 would also disturb fish and wildlife in the vicinity.	<ul style="list-style-type: none"> <li>• Staging Area SA3 shall be reconfigured as close as possible to the toe of the I-5 embankment to avoid existing seasonal wetlands.</li> <li>• Staging Area SA4 shall be relocated into the W4 wetland restoration footprint and adjacent ruderal habitat, avoiding areas of seasonal wetlands to the west.</li> </ul>	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Biological Resources		Prior to construction, the boundaries of staging areas and haul routes shall be flagged by a qualified biologist. In addition, a biological monitor shall be present during the pre-construction meeting and during initial grading of these areas to ensure that no construction activity occurs outside of the designated construction boundaries.	Less than significant
		All sensitive biological areas within the project site but outside the restoration footprint shall be delineated on construction plans and flagged in the field in order to avoid any impacts to special status plants or habitats.	
		Prior to any construction-related disturbances, all construction personnel shall attend an environmental training session that shall discuss the sensitive resources in the project area and the mitigation measures designed to protect them.	
		All haul roads and construction staging areas (with the exception of SA3) shall be restored to pre-disturbance construction conditions following completion of construction.	
		Prior to use of SA3 during the March through September period, a qualified biologist shall confirm the absence of nesting by least terns, snowy plovers, or other sensitive bird species, within 500 feet of the staging area and associated haul route.	

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Biological Resources		No excavation shall occur at the river mouth (SA1) until a fenced access way has been installed to direct beach users around the construction and down to the beach. This fencing would ensure that vegetated foredunes and coastal bluff scrub would not be impacted by beach users looking for an alternate route to the beach.	Less than significant
		All vehicles and construction equipment shall be parked, and equipment refueling and maintenance shall take place only in designated areas where potential spills of fuel, lubricants, or coolants can be contained and cleaned up without impacts on adjacent wetland and aquatic habitats.	
		The proposed bridge and temporary water control structure needed to accommodate the haul road proposed to cross I-5 shall incorporate gates or culverts that can be opened and closed temporarily, enabling tidal and river flows to pass through the structure during periods when water control is not needed but the bridge must be left in place for use as a haul route.	
	Beach disposal could adversely impact grunion spawning or the survival of eggs and larvae from previous spawns.	Beach disposal shall not occur during the high tide spawning and hatching periods of the California grunion, as predicted by the CDFG.	Less than significant
	<u>Destruction of jurisdictional wetlands that are converted to uplands through use of disposal site DS38.</u>	Based on USACE final determination of jurisdictional area at DS38, compensatory acreage of wetlands <u>would have to be provided at a 4:1 ratio</u> for any unavoidable losses of jurisdictional habitat. <u>Mitigation acreage does not appear to be available, making use of this site potentially infeasible.</u>	<u>Significant unless sufficient mitigation acreage were provided</u>

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Biological Resources	A portion of the trail alignment (up to 2 acres) would require the conversion of wetlands to non-wetland trail use.	<p>The JPA shall work with the USACE to determine the exact acreage of wetland habitat that would be impacted by the construction of the Coast to Crest Trail. Impacts to freshwater marsh (up to 0.28 acre) shall be mitigated at a 1:1 ratio; impacts to seasonal salt marsh (up to 1.18 acres) shall be mitigated at a 4:1 ratio; and impacts to tidal wetlands (up to 0.5 acre) shall be mitigated at a 4:1 ratio. To mitigate for these impacts, creation of up to 0.28 acres of freshwater marsh, up to 4.7 acres of seasonal salt marsh, and up to 2 acres of tidal wetlands are proposed.</p> <p>These mitigation areas are shown on figures 2.3.1-1, 2.3.2-1, 2.3.3-1, 2.3.4-1 and 2.3.5-1 as areas M32, M33, M34 and M37. Area M32 represents the creation of up to 2.31 acres of high salt marsh, M33 represents the creation of up to 1.15 acres of seasonal salt marsh, M34 represents the creation of up to 0.30 acres of freshwater marsh, and M37 represents the creation of up to 4.75 acres of salt marsh transition habitat. An additional 0.12 acre of wetland mitigation would be required if the Coast to Crest Trail were to accommodate the tram. The exact amount of mitigation acreage for the Coast to Crest shall be determined during the permit application process.</p>	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Biological Resources	If inlet maintenance ceases, populations of tidal marsh plants, invertebrates, fish, and wildlife that become established in the restored, fully tidal system could be adversely affected by inlet closure and the resulting deterioration of water quality.	Prior to the approval of the San Dieguito Wetland Restoration project by the JPA, the JPA shall enter into an agreement with SCE that would provide the legal and financial guarantees necessary to ensure that the inlet will be maintained in an open condition in perpetuity and the restored wetland will continue to attain the biological benefits described in section 4.4.	Less than significant
	Areas near the river mouth would be disturbed during wetland construction and subjected intermittently to disturbance in conjunction with inlet maintenance. Disturbance would include both the direct effects of equipment operation and the indirect effects of redirected foot traffic.	Impacts on these sensitive habitats are potentially significant but mitigable by confining activities to areas of lowest biological value and providing public access along pre-existing trails where native vegetation would not be impacted.	Less than significant
	A significant increase in the turbidity of the water associated with construction may temporarily reduce foraging success of terns using the lagoon area during the construction period. The disruption of least tern foraging or breeding activities would be a significant impact that could be mitigated by the avoidance of construction activities within 500 feet of nesting birds, and the installation of sediment fencing around work areas and other erosion control measures (described under the water quality mitigation section) to control erosion and limit turbidity.	See Hydrology/Water Quality above.	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Biological Resources	If breeding on the site occurred during construction, least Bell's vireo could be adversely affected.	Least Bell's vireo presence/absence surveys shall be conducted in the spring by a qualified, USFWS approved biologist. Surveys shall take place in the riparian habitat in the southeastern part of the property prior to the commencement of any activities within 500 feet of that area. If this species is present during its breeding season, grading and other intense activity associated with habitat restoration within 200 feet, or as otherwise determined by the USFWS, of the breeding habitat shall be scheduled to occur outside the least Bell's vireo breeding season (approximately March 15 through September).	Less than significant
	Possible disturbance of Belding's savannah sparrow during nesting season.	Belding's savannah sparrow presence/absence surveys shall be conducted in the spring by a qualified, USFWS approved biologist in all suitable habitat within the project area. Construction staging, excavation, dredging, disposal sites use, and berm creation shall be scheduled to occur outside the breeding season for Belding's savannah sparrow (March 1 to August 1) for all activities that would occur in or within 100 feet of habitat known to support Belding's savannah sparrow breeding. Obtain CDFG incidental take permit as required.	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Biological Resources	Predation on least tern or snowy plover nests could be increased, or nesting could be discouraged, by fences, structures, bushes, or public access that is too close to the nest sites.	California least tern and western snowy plover breeding habitat created onsite shall include the following characteristics: <ul style="list-style-type: none"><li>• The nesting sites shall be monitored to address fencing and potential predation issues. If least terns begin using the nesting sites, the nesting attempts shall be monitored to determine if predation is a problem, and if so, whether it is mammalian or avian in origin, and appropriate measures shall be taken to eliminate any future predation.</li><li>• Large shrubs or man-made structures that could be used as perches by predators shall not be allowed on the berms near the nest sites.</li><li>• Fencing shall not be installed initially around the nesting sites west of the highway, and shall be based on monitoring studies on the incidence of predators following construction.</li><li>• The nesting sites shall be monitored to address fencing and potential predation issues. If least terns begin using the nesting sites, the nesting attempts shall be monitored to determine if predation is a problem, and if so, whether it is mammalian or avian in origin.</li></ul>	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Biological Resources		<p>If the use of fencing is unavoidable (to exclude mammalian predators), the following measures shall be required as part of the fence installation: fencing shall be installed at the base of elevated breeding habitat or if there is no elevation difference, at a distance to eliminate vantage sites for avian predators; materials that are mechanical deterrents to perching shall be installed on top of the fence. If these measures do not solve the problem, additional measures shall be used, such as protection of individual nests, and trapping and relocation of problem predator birds.</p>	Less than significant
		<p>Public access points (trails or lookouts) shall not be constructed within 100 feet of any tern nest site. Trails or access points shall be temporarily closed if terns nest within that distance.</p>	
	<p>Possible elimination of local populations of non-listed sensitive plant species (southern tarplant, Coulter's goldfields, Del Mar sand aster, woolly seablite) if restoration activities cannot avoid sites supporting them.</p>	<ul style="list-style-type: none"> <li>• Non-listed, sensitive plant species shall be avoided to the maximum extent possible. Where impacts cannot be avoided, seed shall be salvaged from impacted plants and an attempt shall be made to reestablish populations in suitable habitat. Restoration efforts onsite shall use seed collected from the site, where feasible.</li> </ul>	

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Biological Resources		<p>A habitat restoration and monitoring plan, including success criteria that recognize the experimental nature of such transplantation, shall be prepared for any reestablishment effort. This plan shall include the following details for sensitive plant species:</p> <ul style="list-style-type: none"> <li>• Restoration efforts shall plan to establish the Southern tarplant populations on spoil disposal areas, as this species appears tolerant of saline compacted soils. The species shall be included in the proposed seed and plant mix for use in freshwater marsh transitional vegetation. In order to obtain viable seed, the plants shall not be impacted until the seed has been allowed to mature.</li> <li>• Restoration efforts shall plan to establish the Coulter’s Goldfields populations in areas of salt marsh playas and fringing areas that receive seasonal rainwater flushing that reduces soil salinity. The species shall be included in the proposed seed and plant mix for use in upland restoration of the site. In order to obtain viable seed, the plants shall not be impacted until the seed has been allowed to mature.</li> <li>• Impacts to the red sand-verbena colony onsite would be considered locally significant and therefore, the area occupied by the red sand-verbena shall be fenced to prevent inadvertent impacts to these plants and their habitat.</li> </ul>	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Biological Resources		<ul style="list-style-type: none"> <li>• If individual Lewis’s evening primrose plants are impacted, this species shall be included in the proposed seed and plant mix for use in similar habitat on conserved lands; seed shall be collected from Penasquitos Lagoon, which supports the only large population in the County.</li> </ul>	
		<ul style="list-style-type: none"> <li>• If individual Del Mar Mesa sand aster plants are impacted, this species shall be included in the proposed seed and plant mix to reestablish the plant on a nearby site on suitable habitat containing sandstone. Seed collection from existing plants on site shall occur to support the inclusion of local genotypes of this species in the revegetation seed and plant mix for coastal sage scrub and chaparral.</li> </ul>	
		<ul style="list-style-type: none"> <li>• Where larger populations of woolly seablite (Suaeda) cannot be avoided, plants shall be salvaged for propagation or transplanted into a suitable protected location.</li> </ul>	
	Disruption of breeding by sensitive non-listed bird species.	To avoid impacts to sensitive bird species that potentially nest in the upland habitat within the project boundaries (including California Species of Special Concern species such as loggerhead shrike, burrowing owl, and northern harrier), surveys shall be conducted by a qualified biologist during the appropriate breeding season for each species. Survey results will determine the need for construction setbacks from nests to reduce impacts to breeding success.	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Biological Resources	Destruction of burrows occupied by burrowing owls.	If burrowing owl burrows are disturbed during construction activities suitable (burrow) habitat shall be created. Any impact to occupied burrowing owl burrows would be considered locally significant and shall require the creation of artificial burrows in suitable habitat that is destined for long-term preservation. Burrowing owls shall either be passively relocated or captured and released at the preserved site. Relocation shall occur in the non-breeding season to avoid impacts to eggs, nestlings, or dependent juveniles.	Less than significant
	Disruption of nesting by sensitive riparian bird species.	To avoid impacts to sensitive bird species that potentially nest in the riparian or wetland habitat within or near the project boundaries (including California Species of Special Concern species such as yellow-breasted chat, Cooper's hawk, and tricolored blackbird and Fully Protected species such as the white-tailed kite), surveys shall be conducted by a qualified biologist during the appropriate breeding season for each species. All initial disturbances to riparian or wetland vegetation within 250 feet of known breeding sites for these species shall occur prior to February 15 or after July 15.	Less than significant
	Mortality to sensitive (non-listed) wildlife species during construction.	All wildlife in harm's way during construction, including individual southwestern pond turtles, shall be collected and relocated to suitable habitat by a biological monitor.	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Natural Resources	Use of <u>DS32</u> would result in the loss of 43 acres of Prime Farmland. <u>The use of DS33, DS34, and DS35 and construction of the 25-car parking lot</u> would impact about 45 acres of land that are under cultivation and about 34 acres of land classified as Farmland of Statewide Importance. The use of offsite disposal area DS36 would displace 24 acres of land that are under cultivation and 26 acres that are classified as Farmland of Statewide Importance.	No feasible measures have been identified. It is only through the selection of an array of disposal site options that do not include <u>DS32, DS33, DS34, DS35, and DS36</u> that the impacts to important farmland at <u>these sites</u> would be avoided.	Significant
Landform Alteration/ Visual Quality	The filling of DS32, DS33, DS34, DS35, DS36, and DS38 would result in a significant impact to natural landforms (Landform Alteration).	Impacts associated with landform alteration are only mitigable through a redesign of the project to reduce the amount of fill relocated to any one spot within the project boundaries or by eliminating one or more of the disposal sites from the list of potential options. Unless redesigned or eliminated, the grading proposed at disposal sites DS32, DS33, DS34, DS35, DS36 and DS38 would be considered significant and unmitigated.	Less than significant if project is redesigned
	If the parking lot at DS37 were not landscaped in association with resurfacing following disposal, the expanse of asphalt that would be used to resurface the site would be more noticeable from the roadway than that which currently exists (Visual Quality).	The area shall be landscaped in accordance with a landscape plan, approved by the CCC. This landscaping plan shall be implemented in association with the resurfacing of the parking area.	Less than significant
	The stone revetment along the toe of the longest berm (in Area B8) and Stone Revetments 1 and 2 would cause an adverse visual impact (Visual Quality).	Those rocks that would be exposed and visible to the public in Stone Revetments 1, 2, and 3 shall be of a color that will blend in with the natural color of the soils in the area.	Less than significant
	The articulated concrete block (ACB) mats above the stone revetment for berm B8 would cause an adverse visual impact (Visual Quality).	The ACB mats and the surrounding area shall be revegetated, as described in section 2.3.1.4.4, and monitored by the CCC in accordance with permit conditions.	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Landform Alteration/ Visual Quality	When considered as a separate project element, all three berms would result in an adverse impact to landforms due to their height and the amount of fill required (Landform Alteration).	It is not feasible from a hydrologic perspective to reduce the amount of grading required to construct the proposed berms.	Significant
	Nesting sites NS11, NS12, and NS14 would require more than 2,000 cubic yards of earth and sand per acre and would have an elevation more than 10 feet above the finished grade (Landform Alteration).	No feasible mitigation measures have been identified.	Significant
	The light-colored plateaus of the new nesting sites (excluding NS15) would contrast noticeably with the surrounding area, particularly when seen from higher elevations (Visual Quality).	No feasible mitigation measures have been identified.	Significant
	Earthmoving/construction activities would have an adverse visual impact for between 2 and 4 years until the vegetation is established (Visual Quality).	No feasible mitigation measures have been identified to reduce impacts during this time period.	Significant
	The Nature/Interpretive Center would be visually compatible with the adjacent commercial development, but would restrict views of the river valley from a portion of Via de la Valle (Visual Quality).	The form, mass, and profile of all structures and architectural features shall be designed to blend with the surrounding terrain.  Materials, finishes, and colors of the main building, accessory structures, and any walls or fences shall be compatible with the intent of minimizing the visibility of the project. Colors shall be limited to subtle earthtone hues, with style and texture that reflects traditional/rural character of the river valley. All glass shall be non-reflective.	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Landform Alteration/ Visual Quality		<p>Grading associated with the construction of the Nature Center shall be designed so as to reduce the need for manufactured slopes visible from open space areas.</p> <p>Parking areas shall be sited and/or landscaped to minimize visibility from major roadways and sensitive viewsheds.</p> <p>Native species shall be the predominant plant material used in and around park facilities.</p> <p>Night lighting shall be minimized to that required for security/safety purposes.</p> <p>Structures shall be oriented on the site in a manner that minimizes the blockage of views from adjoining public areas.</p>	

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Landform Alteration/ Visual Quality	The use of area U18 for temporary parking, truck trailer storage, show barns and/or practice tracks, and/or uncovered show rings also could block some or all of the views of the river valley from Via de la Valle (Visual Quality).	To mitigate visual impacts from potential use of area U18 by the District, the District shall prepare a site design for the specific use(s) proposed on the site. The site design shall incorporate the above outlined measures described for the Nature/Interpretive Center. In addition, if the site is to be used for seasonal parking, the District shall prepare a landscape plan that addresses the visual appearance of the parking area during the rest of the season. The land exchange agreement between the District and the JPA, if prepared, shall limit any future use of the property to the specific use(s) stated in the agreement. The specific site design shall be evaluated to fully assess potential visual impacts as part of the subsequent environmental review process that is required to address potential traffic impacts from such uses. The determination of whether or not potential impacts to visual quality from the specific proposal are mitigated to below a level of significance would occur as part of subsequent environmental review.	Unknown
Traffic/ Circulation	During construction periods of heavy truck traffic, in combination with periods of seasonal traffic congestion in the region (during the Del Mar Fair, thoroughbred racing season, or high summer beach use), the project could increase traffic congestion to significant levels within roadways adjacent to the site.	Implement a traffic management plan that would minimize project-generated truck traffic on roadways adjacent to the site during peak seasonal traffic periods. The traffic plan shall also include measures to accommodate the movement of trucks to and from the project site during periods of intense truck activity, such as using flagmen and installing warning signs to notify motorists of the presence of truck activity.	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Traffic/ Circulation	Construction of the Coast to Crest Trail from I-5 west to Jimmy Durante Boulevard could significantly reduce the number of parking spaces (up to 150) in the District-owned dirt parking lot located south and east of Jimmy Durante Boulevard during high volume Del Mar Fair days.	The Plan Implementation section of the Master Park Plan for the lagoon area shall include the following requirements: (1) The JPA shall work with the District to refine the current alignment for the Coast to Crest Trail in the area west of I-5 in order to minimize the loss of parking spaces along the southern edge of the parking lot; and (2) the JPA shall work with the District to develop a contingency parking plan for days of very high attendance that could involve permitting parking on the trail, where feasible, and use of the 60 space parking lot at the proposed visitor/interpretive center.	Less than significant
	Future use of area U18 for purposes other than open space and the extension of the Coast to Crest Trail could generate potentially significant levels of traffic.	The Master Park Plan for the lagoon area shall include in the Plan Implementation section the following condition: Prior to JPA Board approval of the lease or sale of area U18 (the Via de la Valle property), environmental analysis shall be conducted to consider any project specific proposals for area U18. Environmental review shall include a traffic impact analysis.	Unknown
Air Quality	Phases 1/2 construction would exceed the NO <sub>x</sub> emissions threshold of 50 tons per year.	Implement two-degree injection timing retard on diesel-powered equipment.	Less than significant
Public Health/ Public Safety	The number of aquatic mishaps at the inlet channel as it crosses the beach may increase since the channel would be wider than at present (most of the time), more of the channel would be at a constant depth, and a strong tidal inlet current would occur more regularly than at present.	<u>The possible increase in the number of aquatic mishaps in the inlet area would be mitigated by staffing the temporary lifeguard tower at the inlet area on a more regular basis and providing an alternate public access route around the inlet via the pedestrian pathway along the Camino Del Mar Bridge. In addition, the wood pilings located just west of the Camino Del Mar Bridge will be removed by the applicant. This will eliminate a secondary hazard source for swimmers and waders caught in</u>	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
<p><u>Public Health/</u> <u>Public Safety</u></p>		<p><u>strong currents. To ensure appropriate lifeguard staffing, the applicant shall provide to the City of Del Mar as a condition of the Coastal Development Permit and required permits from the City of Del Mar, the funds necessary to staff two additional seasonal lifeguards for the initial two years following project completion. In addition, the applicant would be required to post a bond (the amount to be determined by the City of Del Mar) to cover additional staffing in future years. The exact level of staffing required to address long-term project-related mishaps in the inlet area would be determined as a result of the monitoring program described below. The issue of an alternate public access route is addressed in section 4.1 of this document.</u></p> <p><u>In this report, current estimates are based on modeling results, which have inherent levels of error, and the inlet channel depth estimate (-2 NGVD) is based on design inputs. The actual currents introduced by this project may be somewhat less or greater than these estimates. As stated above, actual channel depths may vary considerably over time depending on various channel characteristics and the frequency of maintenance. A prudent measure would be to implement a monitoring program after project implementation to gain greater confidence in both current and depth estimates. If the actual values are demonstrated to be significantly different, the risk to public health may also be significantly different. To address this issue, the following measures shall be made conditions of the Coastal Development Permit</u></p>	

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
<p><u>Public Health/</u> <u>Public Safety</u></p>		<p><u>and future permits required from the City of Del Mar: a program to monitor changes at the inlet channel during the initial two years following project completion shall be developed by the applicant in association with the City of Del Mar and conducted by the project applicant. The results of this monitoring program shall then be provided to the CCC and the City of Del Mar for review on a yearly basis. If the initial results indicate a significantly higher risk to public health, as determined by the CCC and City of Del Mar, then funding for additional lifeguard patrols in this area shall be provided by the project applicant to the City of Del Mar, which is responsible for lifeguard activities in this area. This measure would mitigate the potential impact to a less than significant level (Class II). To ensure that this measure is implemented, SCE shall post a bond with the City of Del Mar to cover the cost of additional lifeguard patrols during peak use periods (the actual amount of the bond would be worked out between the City of Del Mar and the applicant during the processing of required permits from the City of Del Mar). If during the two-year monitoring program, it is concluded that there is a significantly higher risk to public health that originally estimated, the funds set aside by the applicant would be used to increase lifeguard patrols. If, however, the monitoring program indicates no significant change over the original estimates, the bond would be refunded to the applicant following review and approval of the two-year monitoring report.</u></p>	

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Public Health/ Public Safety	<u>There is a potential for uncovering hazardous wastes and/or munitions during excavation.</u>	<u>A monitoring, emergency response, and reporting plan shall be prepared and implemented prior to the start of any on-site dredging or excavation. The plan shall address procedures for protecting worker safety and public health in the event that event of hazardous wastes or munitions are encountered. The construction contractor shall be responsible for implementing this mitigation, with oversight by SCE or JPA.</u>	<u>Less than significant</u>
Cultural Resources	Unanticipated discovery and disturbance of buried archaeological resources during excavation and dredging.	Implement archaeological monitoring program.	Less than significant
Paleontological Resources	Unanticipated discovery and disturbances of fossils during excavation and grading.	Implement paleontological monitoring program.	Less than significant
Public Utilities	Several electrical transmission lines would have to be relocated.	Relocation of electric lines shall be performed in a manner that avoids or minimizes service disruptions.	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Public Utilities	The Pacific Bell telephone duct bank located to the east of the I-5 right-of-way could experience exposure due to scour at the opening to the southern basin on the south side of the San Dieguito River.	<p>Mitigation for potential impacts to the Pacific Bell duct bank could involve one of the following options:</p> <ul style="list-style-type: none"> <li>• Lower the existing concrete vault to avoid impacts from increased scour; or</li> <li>• Modify the currently proposed channel configuration in the area immediately east of the I-5 bridge to reduce anticipated channel velocity during a flood event. This would involve moving the western end of Berm B8 slightly to the north in order to reduce flow constriction in this area; or</li> <li>• Construct a grade control structure downstream of the duct bank. Two methods are available, including (1) driving a steel sheet pile wall parallel to and some distance downstream of the duct bank at or slightly below the existing channel bed elevation, or (2) installing a cellular concrete mat, such as armorflex, over the existing duct bank.</li> </ul> <p>The following measures shall be required to mitigate any additional impacts associated with the implementation of area W6a, which may occur some time after the initial SCE project is completed.</p> <ul style="list-style-type: none"> <li>– A detailed scour analysis of the feeder channel area (W6a) shall be prepared for review and approval by the City Engineer. If, based on the scour analysis, impacts related to localized scour are identified, one of the following measures shall be included as a condition of the Land Development Permit:</li> </ul>	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Public Utilities		<ul style="list-style-type: none"> <li>- Relocation of the inlet channel to area W6a east, up to a distance of 500 feet, to avoid potential scour impacts to the cable vault, or</li> <li>- Construction of cable vault protection that would extend south beyond the limits of any proposed grading activities.</li> </ul>	
	<p>An 8-inch sewer force main that crosses the San Dieguito River between the Jimmy Durante Boulevard Bridge and the NCTD Railroad Bridge could be disturbed by dredging equipment and project-induced scour.</p>	<p>To mitigate potential direct impacts to the sewer main, the following measures shall be implemented. The location of the sewer main shall be depicted on all construction plans for this portion of the project. As a permit condition, the supervising contractor shall review the location of the main with all appropriate parties and the permit shall outline appropriate measures to be implemented to protect the main from inadvertent damage during project construction. If grading is not required in the vicinity of the sewer main, then no mitigation beyond locating and mapping the main on the construction plans would be required to mitigate potential direct impacts to the sewer facility.</p>	<p>Less than significant</p>

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Public Utilities		<p>Mitigation measures for indirect impacts to the sewer main include the following:</p> <p>Hydrologic modeling shall be conducted by the project applicant for the final restoration grading plan in order to establish the full extent of the scour potential in the vicinity of the sewer main. Based on this analysis, the applicant shall provide to the satisfaction of the Del Mar City Manager specific measures for protecting the main from future project-related scour impacts, should the analysis identify an increased scour potential. These measures may include but are not limited to contributing all or part of the funds needed to relocate the main to the Jimmy Durante Boulevard Bridge or protecting the main in place.</p>	Less than significant
Noise	Use of construction staging area SA1 would create adverse noise impacts to residences located near the mouth of the river.	<p>The boundaries of construction staging area SA1 shall be kept at least 100 feet from residences located adjacent to the south, <u>although as-needed construction work may temporarily occur within 100 feet</u>. All internal combustion engine-driven equipment shall be properly muffled. The use of construction equipment in this area shall be limited to daytime weekdays, 7:00 A.M. to 7:00 P.M. and Saturdays from 9 A.M. to 7 P.M. <u>No construction shall be allowed on Sundays or City of Del Mar holidays</u></p>	Less than significant

**Table ES-1. Summary of Significant Impacts of the Mixed Habitat Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
<u>Noise</u>	Dredging/excavation activities at the river mouth and in the inlet channel would create adverse noise impacts at nearby residences.	When excavation and dredging ( <u>including maintenance dredging</u> ) are required between the beach and the railroad bridge and within a distance of about 1,000 feet to the east of the Jimmy Durante Bridge, an electric dredge, <u>or other equipment that reduces the decibel level to 75 dBA or less</u> , shall be used in place of conventional construction equipment. <u>Maintenance dredging shall occur during daylight hours only.</u>	Less than significant
	The potential use of public address systems at the Via de la Valle site (Area U18) could cause excessive noise at nearby residences.	Use of public address systems shall be conducted in accordance with the provisions of the City of San Diego Noise Ordinance.	
	<u>Noise impacts to residences near the end of Racetrack View Drive could occur from use of the access road leading to construction staging area SA3.</u>	<u>The use of construction equipment in this area shall be limited to daytime weekdays, 7:00 A.M. to 7:00 P.M. and Saturdays from 9:00 A.M. to 7:00 P.M., unless the permitting agency (or agencies) determine, following notification of the surrounding property owners, that extending these hours would not significantly impact the adjoining residents. In addition, the use of this access route by daily construction site workers shall be prohibited. These conditions shall be listed on the construction plans and discussed with the contractor at the preconstruction meeting.</u>	Less than significant

**Table ES-2. Summary of Significant Impacts of the Maximum Tidal Basin Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Land Use	Impacts would be similar to the Mixed Habitat Alternative, although currents could be slightly higher, making crossing of the river inlet by recreation users slightly more difficult	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Hydrology/ Water Quality	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Geology/Soils	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Biological Resources	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Natural Resources	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Landform Alteration/ Visual Quality	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Traffic Circulation	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Air Quality	Same as the Mixed Habitat Alternative, plus Phase 3 construction would exceed the NO <sub>x</sub> emissions threshold of 50 tons per year.	Implement two-degree injection timing retard on diesel-powered equipment and redesign proposed development to shift <u>one</u> percent of the equipment usage from phase 3 into a third year of construction.	Same as the Mixed Habitat Alternative.
Public Health/ Public Safety	Same as the Mixed Habitat Alternative, although the tidal prism would be somewhat larger, resulting in slightly higher currents.	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative

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**Table ES-2. Summary of Significant Impacts of the Maximum Tidal Basin Alternative  
(continued)**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Cultural Resources	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Paleontological Resources	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Public Utilities	Same as shown in Table ES-1 for the Mixed Habitat Alternative.	Same as shown in Table ES-1 for the Mixed Habitat Alternative.	Same as shown in Table ES-1 for the Mixed Habitat Alternative.
Noise	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative

**Table ES-3. Summary of Significant Impacts of the Maximum Intertidal Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Land Use	Impacts would be similar to the Mixed Habitat Alternative, although staging area SA2 may not be required and SA3 would be needed for a shorter period of time	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Hydrology/ Water Quality	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Geology/Soils	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Biological Resources	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Natural Resources	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Landform Alteration/ Visual Quality	Same as the Mixed Habitat Alternative, although impacts from stone revetment 1 would not occur	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Traffic Circulation	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Public Health/ Public Safety	Same as the Mixed Habitat Alternative, although aquatic safety impacts would be the least of any alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Cultural Resources	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Paleontological Resources	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Public Utilities	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Noise	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative

**Table ES-4. Summary of Significant Impacts of the Hybrid Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Land Use	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Hydrology/ Water Quality	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Geology/Soils	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Biological Resources	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Natural Resources	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Landform Alteration/ Visual Quality	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Traffic Circulation	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Air Quality	Same as the Mixed Habitat Alternative	Implement two-degree injection timing retard on diesel-powered equipment.	Same as the Mixed Habitat Alternative
Public Health/ Public Safety	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Cultural Resources	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Paleontological Resources	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Public Utilities	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Noise	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative

**Table ES-5. Summary of Significant Impacts of the Reduced Berm Alternative**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Land Use	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Hydrology/ Water Quality	Same as the Mixed Habitat Alternative, except that grading and berm construction impacts would be relatively smaller and potential contaminant (e.g., trash) inputs from the Interpretive Overlook Trail would be eliminated	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Geology/Soils	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Biological Resources	Same as the Mixed Habitat Alternative, but benefits and impacts reduced relative to other alternatives	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Natural Resources	Same as the Mixed Habitat Alternative, although the use of DS36 would not be required, thus avoiding impacts to agriculture in this area	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Landform Alteration/ Visual Quality	Same as the Mixed Habitat Alternative, although the area to be bermed would be less and stone revetments 1 and 2 would not be required	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Traffic Circulation	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Public Health/ Public Safety	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Cultural Resources	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Paleontological Resources	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative

**Table ES-5. Summary of Significant Impacts of the Reduced Berm Alternative  
(continued)**

<i>Resource</i>	<i>Significant Impact</i>	<i>Mitigation Measure</i>	<i>Significance After Mitigation</i>
Public Utilities	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative
Noise	Same as the Mixed Habitat Alternative, although construction noise would last less time, and noise from maintenance dredging would occur more frequently	Same as the Mixed Habitat Alternative	Same as the Mixed Habitat Alternative